Please provide the following information, and submit to the NOAA DM Plan Repository.

Reference to Master DM Plan (if applicable)

As stated in Section IV, Requirement 1.3, DM Plans may be hierarchical. If this DM Plan inherits provisions from a higher-level DM Plan already submitted to the Repository, then this more-specific Plan only needs to provide information that differs from what was provided in the Master DM Plan.

URL of higher-level DM Plan (if any) as submitted to DM Plan Repository:

1. General Description of Data to be Managed

1.1. Name of the Data, data collection Project, or data-producing Program:

Artificial Reefs

1.2. Summary description of the data:

Artificial reefs provide new or enhanced hard-bottom habitat to areas that may or may not be habitat limited. Artificial habitat provides space that is quickly colonized by sessile organisms and provides new food sources, greater protection of juveniles by providing more space to be used as refuge, and a possible focal point for aggregating adults to spawn. Properly sited, constructed and managed reef sites, particularly multiple-site complexes, can be used to meet a variety of objectives. Traditionally, the majority of artificial reefs in United States coastal marine waters have been sited and built to enhance recreational fishing.

1.3. Is this a one-time data collection, or an ongoing series of measurements? One-time data collection

1.4. Actual or planned temporal coverage of the data:

2018-08-02

1.5. Actual or planned geographic coverage of the data:

W: -180, E: -60, N: 75, S: 15

1.6. Type(s) of data:

(e.g., digital numeric data, imagery, photographs, video, audio, database, tabular data, etc.)
Map (digital)

1.7. Data collection method(s):

(e.g., satellite, airplane, unmanned aerial system, radar, weather station, moored buoy, research vessel, autonomous underwater vehicle, animal tagging, manual surveys, enforcement activities, numerical model, etc.)

1.8. If data are from a NOAA Observing System of Record, indicate name of system:

1.8.1. If data are from another observing system, please specify:

2. Point of Contact for this Data Management Plan (author or maintainer)
2.1. Name:
2.2. Title: Metadata Contact
2.3. Affiliation or facility:
2.4. E-mail address:
2.5. Phone number:
3. Responsible Party for Data Management Program Managers, or their designee, shall be responsible for assuring the proper management of the data produced by their Program. Please indicate the responsible party below.
3.1. Name:
3.2. Title: Data Steward
4. Resources
Programs must identify resources within their own budget for managing the data they produce.
4.1. Have resources for management of these data been identified?
4.2. Approximate percentage of the budget for these data devoted to data management specify percentage or "unknown"):
5. Data Lineage and Quality

NOAA has issued Information Quality Guidelines for ensuring and maximizing the quality, objectivity, utility, and integrity of information which it disseminates.

5.1. Processing workflow of the data from collection or acquisition to making it publicly accessible

(describe or provide URL of description):

Process Steps:

- 2018-07-21 00:00:00 - Identify new reef data points: Compare the number of reefs

in each source with the number of reefs in the appropriate state in the existing MC. gov layer. If the number of reefs in the source data was greater, the new reefs were identified by comparing individual reefs between the source and the MC.gov datasets. Comparison was based primarily on the date the reef was deployed. If that was unavailable, the comparison was based on reef name and ID number. If that was unavailable, the locations were compared. In the case of Alabama, Mississippi and Delaware, this involved converting the source xls/csv to shapefiles.

- 2018-07-22 00:00:00 Add the new reefs from the non-GIS formatted source data (Mississippi, Alabama, Delaware): An excel file of the new reef locations and attributes was created and imported into Arcmap as a table. The table was then converted to an event layer. Attributes from the source data were crosswalked to conform to the MC.gov layer schema. Finally, the event layer was appended to the MC.gov layer after double checking for duplicates via a topology.
- 2018-07-24 00:00:00 Clearance was calculated for records without a value by subtracting the relief from the depth. This approximate clearance should not be used for navigation as it has not been directly measured or verified.
- 2018-07-20 00:00:00 All layers were projected into world mercator
- 2018-07-23 00:00:00 Add the new reefs from the GIS formatted source data (Florida, South Carolina, Texas, FederalR2R): Source data in polygon format was converted to centroid points. New reef points were copied into an empty feature class for processing and attributes from the source data were crosswalked to conform to the MC.gov layer schema. The new feature class was appended to the MC.gov layer after double checking for duplicates via topology.
- 5.1.1. If data at different stages of the workflow, or products derived from these data, are subject to a separate data management plan, provide reference to other plan:
- 5.2. Quality control procedures employed (describe or provide URL of description):

6. Data Documentation

The EDMC Data Documentation Procedural Directive requires that NOAA data be well documented, specifies the use of ISO 19115 and related standards for documentation of new data, and provides links to resources and tools for metadata creation and validation.

6.1. Does metadata comply with EDMC Data Documentation directive?

No

6.1.1. If metadata are non-existent or non-compliant, please explain:

Missing/invalid information:

- 1.7. Data collection method(s)
- 2.1. Point of Contact Name
- 2.4. Point of Contact Email
- 3.1. Responsible Party for Data Management

- 4.1. Have resources for management of these data been identified?
- 4.2. Approximate percentage of the budget for these data devoted to data management
- 5.2. Quality control procedures employed
- 7.1. Do these data comply with the Data Access directive?
- 7.1.1. If data are not available or has limitations, has a Waiver been filed?
- 7.1.2. If there are limitations to data access, describe how data are protected
- 7.2. Name of organization of facility providing data access
- 7.2.1. If data hosting service is needed, please indicate
- 7.3. Data access methods or services offered
- 7.4. Approximate delay between data collection and dissemination
- 8.1. Actual or planned long-term data archive location
- 8.2. Data storage facility prior to being sent to an archive facility
- 8.3. Approximate delay between data collection and submission to an archive facility
- 8.4. How will the data be protected from accidental or malicious modification or deletion prior to receipt by the archive?

6.2. Name of organization or facility providing metadata hosting:

NMFS Office of Science and Technology

6.2.1. If service is needed for metadata hosting, please indicate:

6.3. URL of metadata folder or data catalog, if known:

https://www.fisheries.noaa.gov/inport/item/54191

6.4. Process for producing and maintaining metadata

(describe or provide URL of description):

Metadata produced and maintained in accordance with the NOAA Data Documentation Procedural Directive: https://nosc.noaa.gov/EDMC/DAARWG/docs/EDMC_PD-Data_Documentation_v1.pdf

7. Data Access

NAO 212-15 states that access to environmental data may only be restricted when distribution is explicitly limited by law, regulation, policy (such as those applicable to personally identifiable information or protected critical infrastructure information or proprietary trade information) or by security requirements. The EDMC Data Access Procedural Directive contains specific guidance, recommends the use of open-standard, interoperable, non-proprietary web services, provides information about resources and tools to enable data access, and includes a Waiver to be submitted to justify any approach other than full, unrestricted public access.

7.1. Do these data comply with the Data Access directive?

7.1.1. If the data are not to be made available to the public at all, or with limitations, has a Waiver (Appendix A of Data Access directive) been filed?

- 7.1.2. If there are limitations to public data access, describe how data are protected from unauthorized access or disclosure:
- 7.2. Name of organization of facility providing data access:
 - 7.2.1. If data hosting service is needed, please indicate:
 - 7.2.2. URL of data access service, if known:

https://marinecadastre.gov/data/

- 7.3. Data access methods or services offered:
- 7.4. Approximate delay between data collection and dissemination:
 - 7.4.1. If delay is longer than latency of automated processing, indicate under what authority data access is delayed:

8. Data Preservation and Protection

The NOAA Procedure for Scientific Records Appraisal and Archive Approval describes how to identify, appraise and decide what scientific records are to be preserved in a NOAA archive.

8.1. Actual or planned long-term data archive location:

(Specify NCEI-MD, NCEI-CO, NCEI-NC, NCEI-MS, World Data Center (WDC) facility, Other, To Be Determined, Unable to Archive, or No Archiving Intended)

- 8.1.1. If World Data Center or Other, specify:
- 8.1.2. If To Be Determined, Unable to Archive or No Archiving Intended, explain:
- **8.2. Data storage facility prior to being sent to an archive facility (if any):** Charleston, SC
- 8.3. Approximate delay between data collection and submission to an archive facility:
- 8.4. How will the data be protected from accidental or malicious modification or deletion prior to receipt by the archive?

Discuss data back-up, disaster recovery/contingency planning, and off-site data storage relevant to the data collection

9. Additional Line Office or Staff Office Questions

Line and Staff Offices may extend this template by inserting additional questions in this section.